Q Fever

Agent: Coxiella burnetii (bacteria)

<u>Mode of Transmission</u>: Inhalation of air contaminated with dried placental material, birth fluids, or excreta of infected animals; direct exposure to infected animals or tissues; exposure to contaminated material, such as wool, straw, fertilizer, or laundry.

<u>Signs/Symptoms</u>: Acute infections are characterized by high fever, severe headache, malaise, muscle aches, confusion, non-productive cough, nausea, diarrhea, abdominal pain, and/or chest pain. Patients may have abnormal results on liver function tests and some develop hepatitis. In chronic Q fever, infection persists for more than six months and the most serious complication is endocarditis. As many as 65% of persons with chronic Q fever may die from the illness.

<u>Prevention</u>: Preventive measures include appropriate disposal of potentially infectious tissues and proper hygiene when handling animal birth material.

Other Important Information: Cattle, sheep and goats are the main natural reservoirs for *C. burnetii*. This bacterium is classified by the CDC as a potential bioterrorism agent because it could easily be disseminated and result in a moderate amount of illness.

Two cases of Q fever were reported in Virginia during 2010, which is consistent with the five-year average of 2.6 cases per year. The two cases occurred in adult males in the 20-29 and 30-39 year age groups. One case reported exposure to unpasteurized goat and cow milk, while no potential source of exposure was identified for the other case.